

MR1213376 (94j:17003) [17A30](#) [19D55](#)**Loday, Jean-Louis** (F-STRAS-I); **Pirashvili, Teimuraz** (GE-AOS)**Universal enveloping algebras of Leibniz algebras and (co)homology.***Math. Ann.* **296** (1993), *no. 1*, 139–158.

The notion of Leibniz algebras (a generalization of Lie algebras, where the bracket is not skew-symmetric) arose in works by Cuvier and Loday, where an analogue (for Hochschild homology) of the fact that the cyclic homology of a ring A is the primitive part of the Lie algebra homology of $\mathfrak{gl}(A)$ was proved. In this paper the authors develop the theory of Leibniz algebras: representation theory, enveloping algebra, etc. The main result is the identification of Leibniz algebra [co]homology with an [Ext] Tor functor related to the Leibniz enveloping algebra. The paper also contains results on central extensions of $\mathfrak{sl}_n(A)$ (A a ring) in the Leibniz category. *Benjamin David Enriquez*